

2/11/97



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION VIII

IN THE MATTER OF:

SUMMITVILLE MINE SUPERFUND SITE  
SITE NO. 08-Y3

ASARCO Incorporated,

RESPONDENT.

PROCEEDING UNDER SECTION 122(g)(4)  
OF THE COMPREHENSIVE ENVIRONMENTAL  
RESPONSE, COMPENSATION, AND  
LIABILITY ACT, AS AMENDED  
(42 U.S.C. § 9622(g)(4)).

EPA DOCKET NUMBER  
CERCLA-VIII-97-

98-04

**CERCLA SECTION 122(g)(4) DE MINIMIS  
WASTE CONTRIBUTOR ADMINISTRATIVE ORDER**

**I. JURISDICTION**

1. This Administrative Order on Consent (Consent Order or Order) is issued pursuant to the authority vested in the President of the United States by Section 122(g)(4) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended (CERCLA), 42 U.S.C. § 9622(g)(4), to reach settlements in actions under Section 106 or 107 of CERCLA, 42 U.S.C. §§ 9606 or 9607. The authority vested in the President has been delegated to the Administrator of the United States Environmental Protection Agency (EPA) by Executive Order 12580, 52 *Fed. Reg.* 2923 (Jan. 29, 1987), and further delegated to the Regional Administrators of the EPA by EPA Delegation No. 14-14-E. This authority has been redelegated to the Assistant Regional Administrator for Ecosystem Protection and Remediation.

2. This Order is issued to ASARCO Incorporated (Respondent). The Respondent agrees to undertake all actions required by this Consent Order. The Respondent further consents to and will not contest EPA's jurisdiction to issue this Consent Order or to implement or enforce its terms.

## **II. STATEMENT OF PURPOSE**

3. By entering into this Consent Order, the mutual objectives of the Parties are:

a. to reach a final settlement between the Parties with respect to the Site pursuant to Section 122(g) of CERCLA, 42 U.S.C. § 9622(g), that allows Respondent to make a cash payment, including a premium, to resolve its alleged civil liability under Sections 106 and 107 of CERCLA, 42 U.S.C. § 9606 and 9607 and Section 7003 of the Resource Conservation and Recovery Act, as amended, 42 U.S.C. § 6973, for injunctive relief with regard to the Site, and for response costs incurred and to be incurred at or in connection with the Site, thereby reducing litigation relating to the Site;

b. to simplify any remaining administrative and judicial enforcement activities concerning the Site by eliminating one of the potentially responsible parties from further involvement at the Site; and

c. to obtain settlement with Respondent for its fair share, as determined by EPA, of response costs incurred and to be incurred at or in connection with the Site by the EPA Hazardous Substance Superfund, and to provide full and complete contribution protection for Respondent with regard to the Site pursuant to Sections 122(f)(2) and 122(g)(5) of CERCLA, 42 U.S.C. § 9622(f)(2) and § 9622(g)(5).

## **III. DEFINITIONS**

Unless otherwise expressly provided herein, terms used in this Consent Order that are defined in CERCLA or in regulations promulgated under CERCLA shall have the meaning assigned to them in the statute or regulations. Whenever the terms listed below are used in this Consent Order, the following definitions shall apply:

"**CERCLA**" shall mean the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, 42 U.S.C. § 9601, et seq.

"**Consent Order**" or "**Order**" shall mean this Administrative Order on Consent and all appendices attached hereto. In the event of conflict between this Order and any appendix, the Order shall control.

"**Day**" shall mean a calendar day. In computing any period of time under this Consent Decree, where the last day would fall on a Saturday, Sunday, or federal holiday, the period shall run until the close of business of the next working day.

"**EPA**" shall mean the United States Environmental Protection Agency and any successor departments or agencies.

**"EPA Hazardous Substance Superfund"** shall mean the Hazardous Substance Superfund established by the Internal Revenue Code, 26 U.S.C. § 9507.

**"Information currently known to the United States"** shall mean that information and those documents contained in the Administrative Record and Site File for the Site as of the effective date of this Order.

**"Interest"** shall mean interest at the rate specified for interest on investments of the EPA Hazardous Substance Superfund established by 26 U.S.C. § 9507, compounded on October 1 of each year, in accordance with 42 U.S.C. § 9607(a).

**"New Information"** shall mean information not contained in the Administrative Record or Site File for the Site as of the effective date of this Order.

**"Paragraph"** shall mean a portion of this Consent Order identified by an Arabic numeral.

**"Parties"** shall mean EPA and the Respondent.

**"Respondent"** shall mean ASARCO Incorporated

**"Response Costs"** shall mean all costs of "response" as that term is defined by Section 101(25) of CERCLA.

**"Section"** shall mean a portion of this Consent Order identified by a roman numeral.

**"Site"** shall mean the Summitville Mine Superfund Site Remedial Investigation/Feasibility Study Area within Rio Grande County, Colorado. Approximately 550 acres of the Site, known as the Summitville Minesite, have been disturbed by mining activities and is currently undergoing remedial action. As depicted on the map attached as Appendix A, the Site consists of portions of the Alamosa River Watershed EPA believes may have been impacted by releases of hazardous substances from the Summitville Minesite. More specifically, the Site includes the following areas: Area 1 - Summitville Mine Site -- The area within the mine permit boundaries; Area 2 - Wightman Fork -- The Wightman Fork and associated wetlands between the down stream mine permit boundary to the confluence with the Alamosa River; Area 3 - Alamosa River -- The Alamosa River and associated wetlands from the confluence with the Wightman Fork downstream to the inlet of the Terrace Reservoir; Area 4 - Terrace Reservoir -- The area which contains the Terrace Reservoir; and Area 5 - Below Terrace Reservoir -- The area below the Terrace Reservoir which has been impacted by contamination transported by the Alamosa River and irrigation canals.

"United States" shall mean the United States of America, including its departments, agencies and instrumentalities.

#### **IV. STATEMENT OF FACTS**

4. The United States Environmental Protection Agency (EPA) initiated removal response actions at the Site on December 18, 1992 to address releases or threatened releases of hazardous substances into the Alamosa River and surrounding environment pursuant to the President's authority under Sections 104 and 106 of the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended by the Superfund Amendments and Reauthorization Act of 1986, Pub. L. 99-499, 42 U.S.C. §§ 9604 and 9606(a) (CERCLA).

5. On May 31, 1994, EPA listed the Site on the National Priorities List as a result of releases or threatened releases of hazardous substances at or from the Site.

6. On December 15, 1994, EPA issued 4 Interim Records of Decision selecting the interim remedial actions to be implemented for the following activities and/or areas at the Summitville Mine Site: Water Treatment (WT IROD), Reclamation, the Heap Leach Pad (HLP IROD) and the Cropsy Waste Pile, Beaver Mud Dump/Summitville Dam Impoundment, and Mine Pits (CWP IROD).

7. As of June 30, 1996, the United States incurred \$97 million in response costs responding to the release or threatened release of hazardous substances at or in connection with the Site. The United States continues to incur response costs in responding to the release or threat of release of hazardous substances at or in connection with the Site.

8. EPA alleges that the Respondent is liable for reimbursement of the United States' response costs pursuant to Section 107 of CERCLA, 42 U.S.C. § 9607.

9. Respondent conducted sporadic exploration and related activities from 1974 through 1980 under a lease that expired in 1981. ASARCO's exploration program consisted of a systematic program of percussion and diamond core drilling, aimed at determining the ore reserves and the viability of conducting mining operations at the Site. First, ASARCO drilled 2 deep holes, to depths of 3,000 and 4,700 feet, respectively, to test its theory that a large porphyry-type copper deposit was present at the Site. In 1975, ASARCO drilled 396 shallow holes and 14 deep holes as part of this drilling program. ASARCO also conducted backhoe trenching as part of its exploration program to generally define the boundaries of outcrops and underground mineral deposits. It is estimated that approximately 31 tons of material was generated from ASARCO's drilling program, some or all of which is believed to have been removed from the Site for sampling and analysis.

10. ASARCO dug 49 trenches amounting to 15,213 linear feet, with an average depth of 6 feet. The procedure for sampling these trenches was to collect approximately ½ pound per linear foot of trench. This sampling effort would have amounted in 2.9 tons of waste material disturbed by ASARCO remaining on-site. The trenches were backfilled and revegetated in accordance with contemporary mining practices and Colorado Mined Land Reclamation Board requirements.

11. ASARCO also evaluated several adits, including the Copper Hill, Del Norte, Upper Highland Mary, Esmond, Science, Narrow Gauge, Aztec, Old Pickens, Chandler, Iowa and French adits. A total of 3,915 feet was cleared of ice and mapped and 2,110 feet of these adits was sampled and assayed by ASARCO. The adit rehabilitation program was abandoned, without ASARCO either retimbering or otherwise conducting any rehabilitation activities.

12. As of August 1976, ASARCO also abandoned its plan to dewater and rehabilitate the Missionary Shaft or its underworkings. ASARCO did not conduct any rehabilitation or mining activities at the Missionary Shaft or its associated underworkings.

13. Based on the data available to the Parties, EPA and Respondent estimate that the amount of material generated as a result of ASARCO's limited exploration activities amounts to approximately 31 tons or 25 yds.<sup>3</sup> EPA and ASARCO also agree that its limited diamond drilling program may have disturbed approximately 0.14 acre of the surface of the Site. EPA and ASARCO also agree that the actual amount of time ASARCO conducted its exploration activities lasted a total of approximately 16 months.

14. On July 1, 1987, Hydrometrics, Inc. became a wholly-owned subsidiary of ASARCO. As documented in ASARCO's CERCLA Section 104(e) information request response, Hydrometrics, Inc. performed certain testing, sampling and data compilation functions as a contractor or consultant to Galactic Resources, Ltd. or its wholly-owned subsidiaries, including Galactic Resources, Inc., Galactic Services, Inc. or Summitville Consolidated Mining Company, Inc. There is no indication, however, that any of Hydrometrics' activities resulted in the generation or disposal of any waste materials on-site.

15. The total volume of waste rock, tailings and other mine waste (including the Heap Leach Pad) requiring remediation at the Site is approximately 11 million yds.<sup>3</sup> According to the WT IROD, approximately 321,000 pounds of copper per year, if left untreated, would contaminate the receiving waters surrounding the Site, including the Wightman Fork and Alamosa River. EPA has determined parties are eligible for a de minimis settlement if their contribution of mine waste and metals loading is equal to or less than 3% of the total volume of hazardous substances contributed to each of these media. The Respondent's contribution of hazardous substances to these media are below the 3% de minimis cut-off established by EPA for the Site.

16. Based on Information currently known to the United States, EPA has calculated the Respondent's de minimis eligibility as follows: EPA has estimated that the amount of hazardous substances allegedly contributed to the Site by Respondents constitutes substantially less than 1% of the total volume of waste rock, tailings or mine waste requiring remediation at the Site. EPA has also determined that the Respondent's activities have not contributed any copper loading to the waters at or emanating from the Site.

17. The material allegedly generated and disposed of by the Respondent therefore involves only a minor portion of the total hazardous substances generated or disposed of at the Site. EPA has also concluded that the hazardous substances allegedly contributed to the Site by Respondent are not significantly more toxic or of significantly greater hazardous effect than other hazardous substances at the Site.

18. EPA estimates that the total response costs incurred and to be incurred at or in connection with the Site by the EPA Hazardous Substance Superfund will be \$152 million. The payment required to be made by the Respondent pursuant to this Order represents only a minor portion of the response costs to be recovered for the cleanup of the Site.

#### **V. DETERMINATIONS**

19. Based upon the Statement of Facts set forth above and on the Information currently known to the United States, EPA has determined that:

(1) The Site is a "facility" as that term is defined in Section 101(9) of CERCLA, 42 U.S.C. § 9601(9).

(2) The Respondent is a "person" as that term is defined in Section 101(21) of CERCLA, 42 U.S.C. § 9601(21).

(3) The Respondent is a "potentially responsible party" within the meaning of Section 122(g)(1) of CERCLA, 42 U.S.C. § 9622(g)(1).

(4) There has been an actual or threatened "release" of a "hazardous substance" from the Site as those terms are defined in Sections 101(22) and (14) of CERCLA, 42 U.S.C. § 9601(22) and (14).

(5) The amount of hazardous substances contributed to the Site by the Respondent and the toxic or other hazardous effects of the hazardous substances contributed to the Site by the Respondent are minimal in comparison to other hazardous substances at the Site within the meaning of Section 122(g)(1)(A) of CERCLA, 42 U.S.C. § 9622(g)(1)(A).

(6) As to the Respondent, this Consent Order involves only a minor portion of the response costs at the Site within the meaning of Section 122(g)(1) of CERCLA, 42 U.S.C. § 9622(g)(1).

(7) The terms of this Consent Order are consistent with EPA policy and guidance for settlements with de minimis waste contributors, including but not limited to, "Standardizing the De Minimis Premium," (July 7, 1995), "Streamlined Approach for Settling with De Minimis Waste Contributors under CERCLA Section 122(g)(1)(A)," OSWER Directive No. 9834.7-1D (July 30, 1993), and "Methodology for Early De Minimis Waste Contributor Settlements under CERCLA Section 122(g)(1)(A)," OSWER Directive No. 9834.7-1C (June 2, 1992).

(8) Prompt settlement with the Respondent is practicable and in the public interest within the meaning of Section 122(g)(1) of CERCLA, 42 U.S.C. § 9622(g)(1).

(9) The settlement of this case without litigation and without the admission or adjudication of any issue of fact or law is the most appropriate means of resolving any liability that the Respondent may have for response actions and response costs with respect to all releases or threatened releases at or in connection with the Site.

#### **V. ORDER**

20. Based upon the Information currently known to the United States and the Statement of Facts and Determinations set forth above, and in consideration of the promises and covenants set forth herein, the following is hereby AGREED TO AND ORDERED:

#### **VI. PARTIES BOUND**

21. This Consent Order shall apply to and be binding upon EPA and upon Respondent and its successors and assigns. Any change in ownership or corporate or other legal status of the Respondent including, but not limited to, any transfer of assets or real or personal property, shall in no way alter such Respondent's responsibilities under this Consent Order. Each signatory to this Consent Order certifies that he or she is authorized to enter into the terms and conditions of this Consent Order and to execute and bind legally the party represented by him or her.

#### **VII. PAYMENT**

22. Within 10 days of the effective date of this Order, Respondents shall pay a total of \$86,052.73 to the Hazardous Substance Superfund as provided below.

23. Payment shall be made by cashier's check made payable to "EPA Hazardous Substance Superfund." The check shall reference the Site name, the name and address

of the Respondent, EPA CERCLA Number 08-Y3 and DOJ Case No. 90-11-3-1133A and shall be sent to:

Mellon Bank  
EPA Region VIII  
Attn: Superfund Accounting  
P.O. Box 360859M  
Pittsburgh, PA 15251

24. If the Respondent fails to make full payment within the time required by Paragraph 22, Respondent shall pay Interest on the unpaid balance. In addition, if Respondent fails to make full payment as required by Paragraph 22, the United States may, in addition to any other available remedies or sanctions, bring an action against the Respondent seeking injunctive relief to compel payment and/or seeking civil penalties under Section 122(f) of CERCLA, 42 U.S.C. § 9622(f), for failure to make timely payment.

25. The Respondent's payment includes an amount representing the Respondent's fair share of: (a) past response costs incurred at or in connection with the Site; (b) projected future response costs to be incurred at or in connection with the Site; and (c) a premium to cover the risks associated with this settlement, including but not limited to, the risk that total response costs incurred or to be incurred at or in connection with the Site by the EPA Hazardous Substance Superfund, or by any private party, will exceed the estimated total response costs upon which Respondent's payment is based.

26. Payments made under this Section may be placed in a site-specific "special" or "reimbursable" account by EPA. This site-specific reimbursable account within the EPA Hazardous Substance Superfund shall be known as the Summitville Mine Superfund Site Special Account and shall be retained and used by EPA to conduct or finance the response actions at or in connection with the Site. Upon completion of the final remedial action for the Site, any balance remaining in the Summitville Mine Superfund Site Special Account shall be transferred by EPA to the general EPA Hazardous Substance Superfund.

#### **VIII. CERTIFICATION OF RESPONDENTS**

27. By signing this Consent Order, the Respondent certifies, that, to the best of its knowledge and belief, it has:

(1) conducted a thorough, comprehensive, good faith search for documents, and has fully and accurately disclosed to EPA, all non-privileged documents currently in its possession, or in the possession of its officers, directors, employees, contractors or agents, which relates in any way to its liability under CERCLA and RCRA for ownership, operation, exploration activities or control of the Site;

(2) not altered, mutilated, discarded, destroyed or otherwise disposed of



any records, documents, or other information relating to its potential CERCLA and RCRA liability regarding the Site after notification of such potential liability; and

(3) fully complied to EPA's satisfaction with any and all EPA requests for information pursuant to Sections 104(e) and 122(e) of CERCLA, 42 U.S.C. §§ 9604(e) and 9622(e).

#### **IX. COVENANTS NOT TO SUE**

28. a. Except as provided in Section XI (Reservation of Rights) of this Order, the United States covenants not to sue or take any other civil or administrative action against the Respondent for reimbursement of response costs or for injunctive relief pursuant to Section 106 or 107(a) of CERCLA, 42 U.S.C. §§ 9606 or 9607(a) or Section 7003 of the Resource Conservation and Recovery Act, as amended, 42 U.S.C. § 6973, relating to the Site. With respect to present and future liability, this covenant not to sue shall take effect upon full payment of the amount specified in Section VII (Payment) of this Order.

b. The United States' covenant not to sue extends to Respondent, and to its predecessors-in-interest, affiliates, successors and assigns, including Hydrometrics, Inc., only to the extent that the liability of such predecessors-in-interest, affiliates, successors and assigns is derivative of Respondent's liability for those acts set forth in Paragraph 9 -14, Section IV of this Order. The United States' covenant not to sue does not extend to any other person.

#### **X. RESERVATION OF RIGHTS**

29. The covenants not to sue by the United States set forth in Paragraph 28 of this Order do not pertain to any matters other than those expressly specified in Paragraph 28. The United States reserves, and this Order is without prejudice to, all rights against the Respondent with respect to all other matters, including but not limited to the following:

- a) claims based on a failure to make the payments required by Section VII (Payment) of this Order;
- b) criminal liability;
- c) any liability against Respondent that results from its future disposal activities at the Site; or
- d) liability for damages for injury to, destruction of, or loss of natural resources, including any cost of assessing the injury to, destruction of, or loss of such natural resources.

30. Notwithstanding any other provision in this Consent Order, the United States

reserves, and this Consent Order is without prejudice to, the right to institute judicial or administrative proceedings against the Respondent seeking to compel Respondent to perform response actions at the Site and/or to reimburse the United States for additional costs of response if New Information is discovered that the Respondent contributed: (a) hazardous substances in an amount greater than 1% of the total volume of waste rock, tailings or mine waste containing hazardous substances requiring remediation at the Site; or (b) hazardous substances that contributed to the total copper loading to the waters at or emanating from the Site; or (c) hazardous substances at the Site which are significantly more toxic or are of significantly greater hazardous effect than other hazardous substances at the Site.

31. For purposes of Paragraph 30, "New Information" shall not include any recalculation of the total volume of waste rock, tailings or mine waste containing hazardous substances requiring remediation at the Site based solely on Information currently known to the United States.

32. In the event the United States institutes judicial or administrative proceedings against the Respondent pursuant to Paragraph 30 above, the Respondent shall:

- (i) be credited, in any subsequent settlement or administrative or judicial proceeding relating to the Site, with the \$86,052.73 payment made pursuant to Paragraph 22 of this Order;
- (ii) retain any defense it may have to liability and any claim it may have under any applicable statute or the common law with regard to any additional amount demanded by the United States in any subsequent administrative or judicial proceeding relating to the Site; and
- (iii) continue to grant any waiver or covenant previously granted to the United States under Section XI of this Order for the amount credited to the Respondent, but such waiver or covenant shall be null and void as to any additional amount demanded by the United States in any subsequent administrative or judicial proceeding relating to the Site.

#### **XI. COVENANT NOT TO SUE BY RESPONDENT**

33. The Respondent covenants not to sue and agrees not to assert any claims or causes of action against the United States, or its contractors or employees with respect to the Site or this Order, including, but not limited to:

- (1) any direct or indirect claim for reimbursement from the Hazardous Substance Superfund (established pursuant to the Internal Revenue Code, 26 U.S.C. § 9507) through Sections 106(b)(2), 111, 112 or 113 of CERCLA, 42 U.S.C. §§ 9606(b)(2), 9611, 9612 or 9613;

(2) any claim arising out of response activities at the Site; and

(3) any claim against the United States pursuant to Sections 107 or 113 of CERCLA, 42 U.S.C. §§ 9607 or 9613, relating to the Site.

34. Nothing in this Order shall be deemed to constitute preauthorization of a claim within the meaning of Section 111 of CERCLA, 42 U.S.C. § 9611, or 40 C.F.R. § 300.700(d).

35. The Respondent also waives any challenge it may have to any response action selected in any Action Memorandum, Interim Record of Decision or final Record of Decision for the Site.

## **XII. EFFECT OF SETTLEMENT: CONTRIBUTION PROTECTION**

36. Nothing in this Order shall be construed to create any rights in, or grant any cause of action to, any person not a party to this Order. The preceding sentence shall not be construed to waive or nullify any rights that any person not a signatory to this Order may have under applicable law. The United States and the Respondents each reserve any and all rights (including, but not limited to, any right to contribution), defenses, claims, demands and causes of action which each party may have with respect to any matter, transaction, or occurrence relating in any way to the Site against any person not a party hereto.

37. Respondent consents and agrees to comply with and be bound by the terms of this Order. The United States and the Respondent agree that this Order, Respondent's consent to this Order and actions in accordance with this Order shall not in any way constitute or be construed as an admission of any liability by Respondents or of any legal or factual matters set forth in this Order. Further, neither this Order, Respondent's consent to this Order, nor Respondent's actions in accordance with this Order shall be admissible in evidence against Respondent without its consent, except in a proceeding to enforce this Order. Respondent does not admit, and retains the right to controvert in any subsequent proceedings other than proceedings to implement or enforce this Consent Order, the validity of the Statement of Facts and Determinations contained in this Consent Order.

38. With regard to claims for contribution against the Respondent, the Parties hereto agree that, as of the effective date this Order, the Respondent and its predecessors-in-interest, affiliates, successors and assigns, including Hydrometrics, Inc., is entitled to such protection from contribution actions or claims as is provided by Sections 113(f)(2) and 122(g)(5) of CERCLA, 42 U.S.C. §§ 9613(f)(2) and 9622(g)(5) for "matters addressed" in this Consent Order. "Matters addressed" by this Order shall include all claims the United States could bring or any other civil or administrative action the United States could take against the Respondent or its predecessors-in-interest, affiliates, successors and assigns, including Hydrometrics, Inc., for injunctive relief or for

reimbursement of response costs pursuant to Section 106 or 107(a) of CERCLA, 42 U.S.C. §§ 9606 or 9607(a) or Section 7003 of the Resource Conservation and Recovery Act, as amended, 42 U.S.C. § 6973, related to the Site.

### **XIII. PUBLIC COMMENT**

39. This Order shall be subject to a thirty-day public comment period in accordance with Section 122(I) of CERCLA, 42 U.S.C. § 9622(I). In accordance with Section 122(I)(3), 42 U.S.C. § 9622(I)(3), EPA may withdraw or modify its consent to this Order if comments received disclose any facts or considerations which indicate that this Order is inappropriate, improper, or inadequate.

### **XIV. ATTORNEY GENERAL APPROVAL**

40. The Attorney General or her designee has approved the settlement embodied in this Order in accordance with Section 122(g)(4) of CERCLA, 42 U.S.C. § 9622(g)(4).

### **XV. EFFECTIVE DATE**

41. The effective date of this Order shall be the date upon which the Assistant Regional Administrator, EPA Region VIII notifies the Respondent that the public comment period undertaken pursuant to Paragraph 39 of this Order has closed and that comments received, if any, do not require EPA's withdrawal from or the modification of any terms of this Order.

IT IS SO AGREED:

ASARCO Incorporated

BY:

  
MICHAEL O. VARNER

Vice President, Environmental Operations

DATE: 2/11/97

IT IS SO ORDERED AND AGREED:

ENVIRONMENTAL PROTECTION AGENCY, REGION VIII

BY:

Martin Heston for  
CAROL RUSHIN

Assistant Regional Administrator  
Office of Enforcement, Compliance and  
Environmental Justice

DATE: 9/2/97

**Figure 1**  
**Summitville Mine Site**  
**Study Areas for Baseline Risk Assessment**

